

Listing of Claims:

1. (Canceled)
2. (Previously Presented) The method of claim 6, wherein the uplink tandem free operation data frames are relayed.
3. (Previously Presented) The method of claim 2, wherein each uplink tandem free operation data frame is relayed in a packet of a certain packet protocol and that only one uplink data frame related to a certain connection is carried in each packet.
4. (Previously Presented) The method of claim 2, wherein the uplink tandem free operation data frames are divided into parts and each part is transmitted in a packet of a certain packet protocol and that only one part related to a certain connection is carried in each packet.
5. (Previously Presented) The method of claim 2, wherein the uplink tandem free operation data frames or parts of the uplink tandem free operation data frames related to more than one connection are carried in each packet.
6. (Currently Amended) A method for transmitting data over packet network, the method comprising:
connecting ~~where~~ a cellular network ~~is connected~~ to a packet network; and
transmitting uplink tandem free operation data frames, which carry coded data and, in a frame structure, inband tandem free operation signalling information related to the coding, ~~are transmitted~~ from the cellular network towards the packet network[[,]]; wherein at least all non-redundant information, which comprises said inband tandem free operation signalling information, from the uplink tandem free operation data frames is extracted from said frames to the packet network and transmitted over the packet network, and the coded data from the uplink tandem free operation data frames is extracted and transmitted over a first packet data connection and the tandem free operation signalling information from the uplink

tandem free operation data frames is extracted and transmitted over a second packet data connection.

7. (Previously Presented) The method of claim 6, wherein said tandem free operation signalling information is extracted and transmitted over a certain packet data connection that confirms delivery of packets.

8. (Previously Presented) The method of claim 7, wherein said tandem free operation signalling information is transmitted using Transport Control Protocol.

9. (Previously Presented) The method of claim 7, wherein said tandem free operation signalling information is transmitted using Real-time Transport (RTP) Control Protocol.

10. (Previously Presented) The method of claim 6, wherein non-redundant data from the uplink tandem free operation data frames is transmitted using a certain protocol that supports real time applications.

11. (Previously Presented) The method of claim 10, wherein the non-redundant data is transmitted using Real-time Transport (RTP) Control Protocol.

12. (Previously Presented) The method of claim 6, wherein the information transmitted over the packet network is processed on an edge of the packet network.

13. (Previously Presented) The method of claim 12, wherein the coded data, which is part of the non-redundant information transmitted over the packet network, is decoded on the edge of the packet network.

14. (Previously Presented) The method of claim 12, wherein downlink tandem free operation frames, which carry said coded data and, as inband signalling in the frame structure, said tandem free operation signalling information, are constructed on the edge of the packet network from the non-redundant information transmitted over the packet network.

15. (Previously Presented) The method of claim 12, wherein
a second cellular network is connected to the packet network,
second uplink tandem free operation data frames which carry coded data
and inband tandem free operation signalling information related to the coding, are
transmitted from the second cellular network towards the packet network,
the uplink tandem free operation data frames and the second uplink
tandem free operation data frames are related to a certain bidirectional connection,
at least all non-redundant information, which comprises said inband
tandem free operation signalling information, from the second tandem free
operation uplink data frames is extracted from said second uplink tandem free
operation data frames and transmitted over the packet network, and wherein
all non-redundant information related to said connection and transmitted
over the packet network is processed on edges of the packet network.

16-19. (Canceled)

20. (Currently Amended) A method for transmitting data over packet network, the method comprising:

connecting ~~where~~ a cellular network is ~~connected~~ to a packet network; and
transmitting uplink tandem free operation data frames, which carry coded
data and, in a frame structure, inband tandem free operation signalling
information related to the coding, ~~are transmitted~~ from the cellular network
towards the packet network[[,]];

wherein at least all non-redundant information, which comprises said
inband tandem free operation signalling information from the uplink tandem free
operation data frames is extracted from said frames to the packet network and
transmitted over the packet network, and the non-redundant information from the
uplink tandem free operation data frames is transmitted using a Real-time
Transport (RTP) Control Protocol that supports real time applications.

21. (Currently Amended) A method for transmitting data over packet network, the method comprising:

connecting ~~where~~ a cellular network ~~is connected~~ to a packet network; and
transmitting uplink tandem free operation data frames, which carry coded data and, in a frame structure, inband tandem free operation signalling information related to the coding, ~~are transmitted~~ from the cellular network towards the packet network[[,]];

wherein at least all non-redundant information, which comprises said inband tandem free operation signalling information, from the uplink tandem free operation data frames is extracted from said frames to the packet network and transmitted over the packet network, the information transmitted over the packet network is processed on an edge of the packet network and the coded data, which is part of the non-redundant information transmitted over the packet network, is decoded on the edge of the packet network.

22. (Currently Amended) A method for transmitting data over packet network, the method comprising:

connecting ~~where~~ a cellular network ~~is connected~~ to a packet network; and
transmitting uplink tandem free operation data frames, which carry coded data and, in a frame structure, inband tandem free operation signalling information related to the coding, ~~are transmitted~~ from the cellular network towards the packet network[[,]];

wherein at least all non-redundant information, which comprises said inband tandem free operation signalling information, from the uplink tandem free operation data frames is extracted from said frames to the packet network and transmitted over the packet network, the information transmitted over the packet network is processed on an edge of the packet network and downlink tandem free operation frames, which carry said coded data and, as inband signalling in the frame structure, said tandem free operation signalling information, are constructed on the edge of the packet network from the non-redundant information transmitted over the packet network.

23. (Previously Presented) A gateway comprising:

input block for receiving uplink tandem free operation data frames transmitted from a cellular network towards a packet network, said frames carrying coded data and, in a frame structure, inband tandem free operation signalling information related to the coding;

extraction block for extracting at least all non-redundant information, which comprises said inband tandem free operation signalling information, from the received uplink tandem free operation data frames; and

output block for transmitting the coded data extracted from the uplink tandem free operation data frames over a first packet data connection and said tandem free operation signalling information extracted from the uplink tandem free operation data frames over a second packet data connection.

24. (Previously Presented) A gateway comprising:

input block for receiving uplink tandem free operation data frames transmitted from a cellular network towards a packet network, said frames carrying coded data and, in a frame structure, inband tandem free operation signalling information related to the coding;

extraction block for extracting at least all non-redundant information, which comprises said inband tandem free operation signalling information, from the received uplink tandem free operation data frames; and

output block for transmitting the non-redundant information extracted from the uplink tandem free operation data frames by utilizing a Real-time Transport Protocol.

25. (Previously Presented) A gateway comprising:

input block for receiving, in packet format, non-redundant information extracted from uplink tandem free operation frames transmitted from the cellular network towards a packet network, said frames carrying coded data and, in a frame structure, inband tandem free operation signalling information related to the coding;

recognition block for extracting coded data from said non-redundant information; and

decoding block for constructing decoded data from said coded data on an edge of the packet network.

26. (Previously Presented) A gateway comprising:

input block for receiving, in packet format, non-redundant information extracted from uplink tandem free operation frames transmitted from the cellular network towards a packet network, said frames carrying coded data and, in a frame structure, in-band tandem free operation signalling information related to the coding;

recognition block for interpreting the received information; and

frame construction block for constructing, on an edge of the packet network from the non-redundant information, downlink tandem free operation frames, which carry the coded data and, as inband signalling in the frame structure, the tandem free operation signalling information.